nesia, zirconia, tungsten, molybdenum and stainless steel.

5. A process for preparing a composite implant material according to claim **1**, comprising forming a sintered apatite material, perforating the sintered apatite material to form holes in a desired configuration therein, and filling or impregnating a thermoplastic or thermosetting resin into said holes.

6. A process according to claim **5**, wherein said sintered apatite material is formed using hydroxyapatite.

7. A process according to claim **5**, wherein said thermoplastic or thermosetting resin is selected from the group consisting of polyethylene, polypropylene, polymethyl methacrylate, polyurethane, polyester, acrylonitrile-butadiene-styrene resins, fluorocarbons, polyamides, polyacetals, polycarbonate, polysulfone, epoxy resins, silicone resins, diallyl phthalate resins and furan resins.

8. A process according to claim **5**, wherein said sintered apatite material is perforated by mechanical perforation or chemical treatment, or by perforation by means of ultrasonic wave, laser or water jet.

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